

(12) **United States Patent**  
**Verma et al.**

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(54) **METHOD AND APPARATUS FOR  
REDUCING MOTION INDUCED BLUR IN  
MEDICAL IMAGES USING TIME GATE  
PROCESSING**

(52) **U.S. Cl.**  
CPC ..... *A61B 6/5235* (2013.01); *A61B 6/032*  
(2013.01); *A61B 6/037* (2013.01); *A61B*  
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*A61B 6/5205* (2013.01)

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(58) **Field of Classification Search**  
None  
See application file for complete search history.

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(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
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(57) **ABSTRACT**

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**Related U.S. Application Data**

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A first gate data representing a first plurality of time gates for a first medical imaging modality (e.g., PET or CT) is provided. The first plurality of time gates are based on a plurality of cycles of an acquired physiological signal of a person. A gate width is determined for a second medical imaging modality (e.g., CT or PET). A second gate data is generated, representing a second plurality of time gates for the second medical imaging modality. Each time gate in the second plurality of time gates has the determined gate width and is generated dependent on a respective time gate in the first plurality of time gates.

(51) **Int. Cl.**  
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**18 Claims, 11 Drawing Sheets**

